

Downtown Lisle

Parking and Transportation Overview



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Parking and Transportation Overview

The Village of Lisle has started a process to update its past parking study and better plan for future development with regards to parking management. In conjunction with the Downtown Master Plan update, the parking study will allow elected officials, municipal staff, residents, business owners, and potential investors to better understand the local issues and challenges to make informed decisions on land use, transportation, infrastructure, and capital improvements. In addition to providing a roadmap to achieving Lisle's community goals, the updated Downtown Master Plan will identify emerging challenges and opportunities for improvement. Having an accurate understanding of the existing parking conditions is a necessary complement to the plan. This Parking and Transportation Overview provides an assessment of the current conditions in Lisle and is designed to provide an agreed upon starting point by which to move forward and create a shared vision.

Introduction

Why does Lisle need to conduct a parking study?

Lisle's downtown was originally designed when most people walked to amenities like stores, schools, and parks. Having retained the historic building density on the west side of Main Street, Lisle has maintained a concentration of businesses and offices in a small area. From restaurants to dentist offices to a trophy store, addressing parking demand in the downtown area is varied and complex. Balancing the needs of local businesses, restaurants, rail commuters, residents, and visitors is no small feat. In addition to commuter and customer parking needs, there are many employees arriving by car. When everyone is trying to go to the same part of town, it can become a challenge to find a parking spot for each automobile.

Parking congestion is an indicator of a lively downtown, but too much congestion can negatively affect businesses and residents alike. To better understand and address the parking challenges in Lisle, the Village is partnering with the Chicago Metropolitan Agency for Planning, to develop locally-appropriate parking management strategies that will strive to balance the needs of the community with the Village's transportation budget. Crafted with assistance from Village staff and in coordination with planners developing the Downtown Master Plan, the planning process will last approximately 12 months and is designed to include input from residents, businesses, and other stakeholders throughout.

How does parking affect a downtown?

The supply and management of parking influence the character, form, function and flow of a community. Too little supply makes the downtown unattractive to potential businesses; mismanaged supply keeps prime spaces full while spaces further from the core stay vacant. Too much parking can increase the demand for parking, when more people decide to drive, resulting in increased traffic congestion. An oversupply of surface parking can negatively impact the built environment by creating large gaps between buildings, rendering walking and bicycling unpleasant and unsafe and limiting other tax-generating uses.

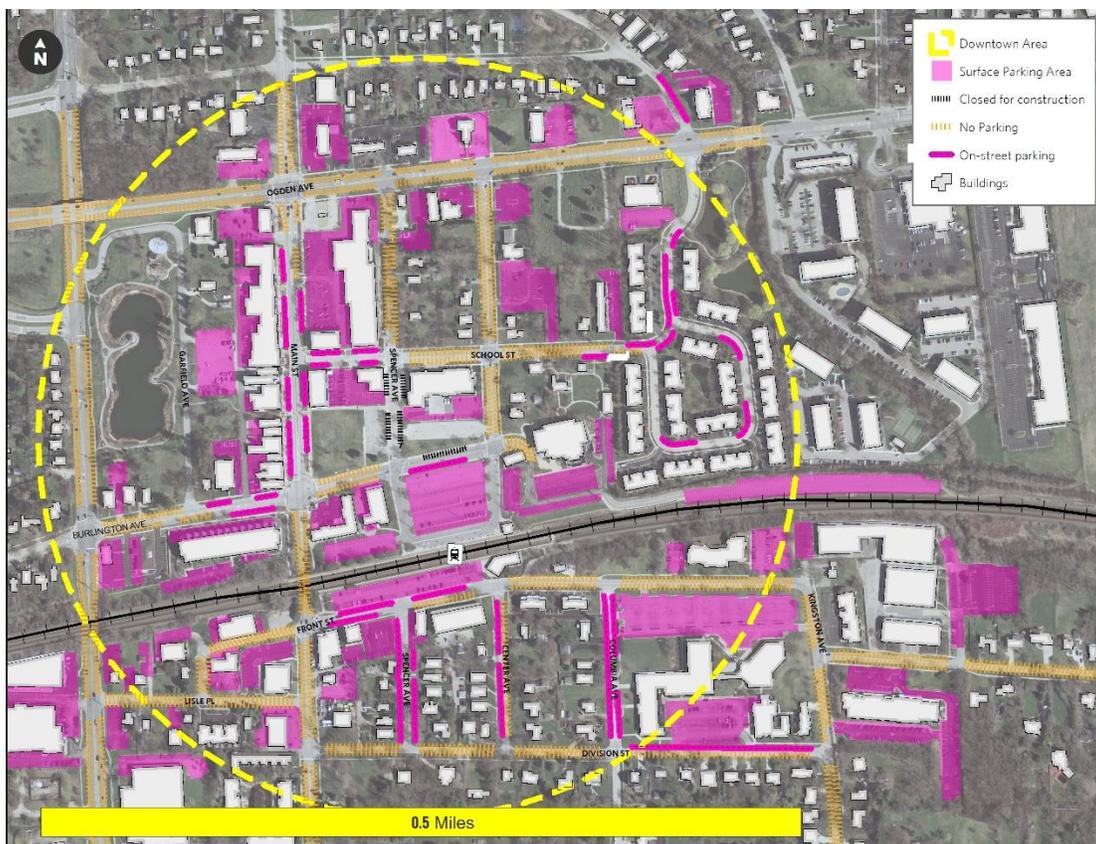
Over the last several decades, the types of business in Lisle have changed and so have the habits of customers. More people are driving, and shopping trips may take longer than they did in the past. Additionally, many employees are arriving from locations outside of Lisle, usually by car.

As communities grow, their parking needs and demands also undergo transformations, requiring different types of parking management. Addressing any parking problems should be part of a comprehensive multi-modal transportation system plan that examines all transportation modes. Driving and parking make up just one facet of a community’s transportation infrastructure. While cars will continue to be the primary mode of transportation for many, small increases in the mode share of more active forms of transportation— like walking, bicycling, and transit — can help alleviate parking problems, while helping residents lead healthier lives. Further, increased use of ride-hailing services (like Uber and Lyft), can also alter people’s transportation habits and lower the demand for parking.

Project process and next steps

The initial phase of the project involves a thorough analysis of the existing conditions within the community regarding transportation and parking. Information was gathered through one-on-one stakeholder interviews, review of previous studies, on-site data collection, and review of maps and data. The results of this analysis are presented in this report. The next step will focus on identifying appropriate strategies for Lisle's parking management based on findings from this report and public engagement, with the culmination in the creation of a parking management plan document containing policies, programs, and action steps recommended to assist Lisle in achieving their desired future vision.

Figure 1. Parking in Downtown Lisle



Downtown Lisle’s Transportation Network

Lisle’s location – with respect to the metropolitan transportation network and relative to regional destinations – is an asset for the community. Lisle’s local road network provides good connectivity within the community and to neighboring municipalities. Transit service, including a station along

Metra's busiest line and complementary Pace bus services, also represents a quality amenity for area residents and businesses.

Key Findings

- The Metra trains along the BNSF tracks running east-west through the Village provide excellent access to downtown Chicago, with frequent express trains.
- According to Metra data from 2014, the downtown Lisle Metra station has the 10th highest boardings among 236 outlying¹ stations.
- The Metra station has many commuters who use Pace Bus to get to the station (reverse commuters as well as traditional commuters).
- The Village has a pedestrian-friendly downtown, with many amenities in close proximity, but few Metra riders walk to the downtown station (2014).
- Bicycling has not been developed to its full potential as a mode of transportation, especially regarding a lack of north-south routes across the BNSF railroad and north to the Morton Arboretum.

Roadways

The Village of Lisle is located south and west of the intersection of Interstate 88 and Interstate 355, providing excellent highway access to the greater Chicago region. Downtown Lisle is centrally located within the Village near the crossroads of Ogden Avenue (U.S. Route 34) and Lincoln Avenue (IL Route 53). These two roadways serve as Lisle's primary east-west and north-south routes respectively, putting nearly all residents in the Village within a 5-minute drive of downtown. Principal north-south arterials include College Road and Naper Boulevard. Maple Avenue, Hobson Road, and Warrenville Road are principal east-west arterials.

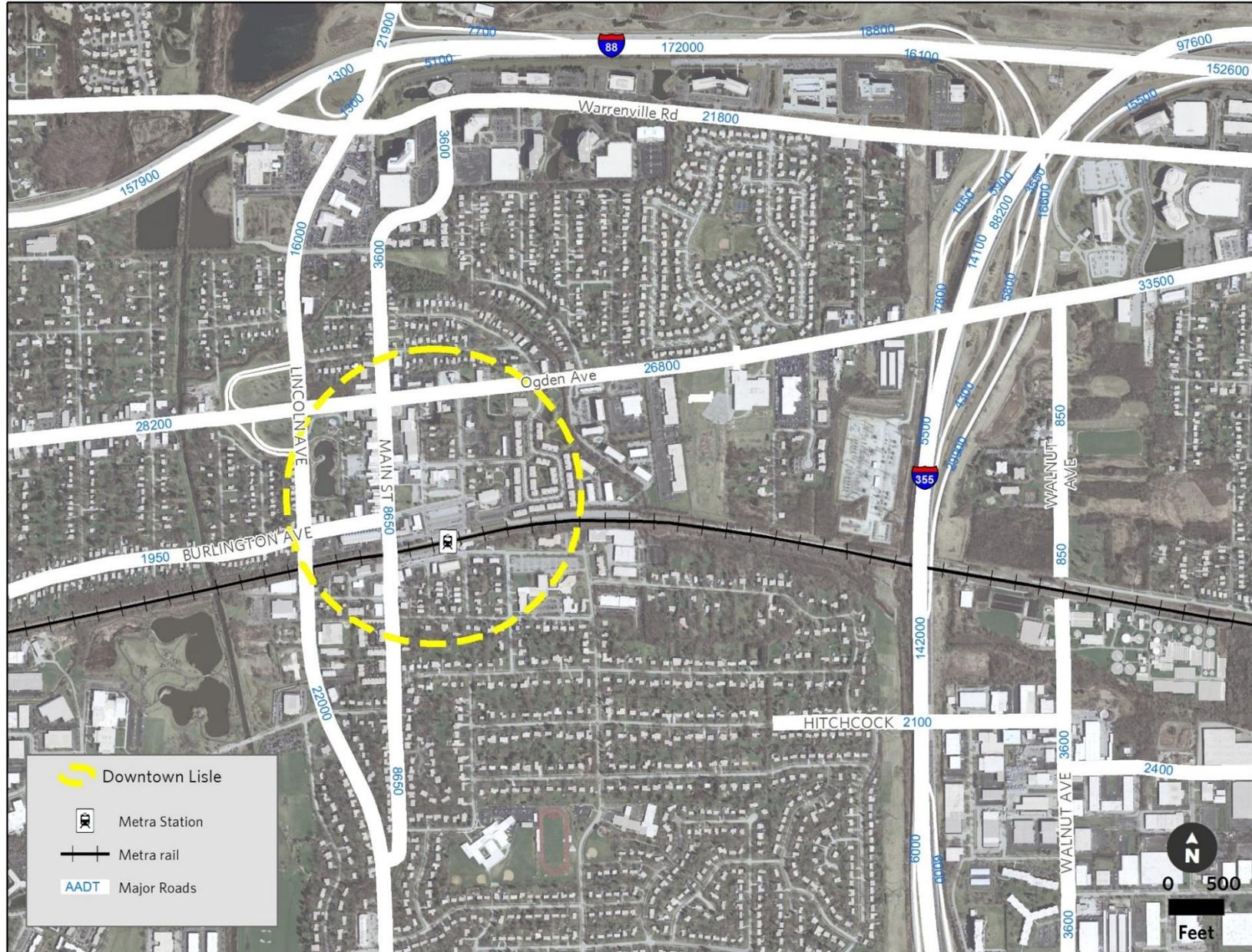
Downtown Lisle is centered at the intersection of Burlington Avenue and Main Street. The gridded street network has some connectivity barriers and the sidewalk network has gaps. New streetscaping along Main Street and School Street fosters a pedestrian-friendly environment. Completed in 2009, the project includes improved building facades, landscaping, widened sidewalks, street furniture, a centrally located fountain, and a planted median. The Lisle Metra station along the BNSF railroad corridor anchors the southern portion of the downtown and is another key amenity that facilitates a multi-modal transportation network.

Most streets in Downtown Lisle are 35 to 40 feet wide with the exception of areas where streetscaping improvements have been installed. In these areas, the roadway includes a row of diagonal on-street parking and a travel lane in each direction and a small, planted median. Curb extensions have been installed at pedestrian crossings to limit crossing distance to just 30 feet.

With the exception of the west side of Main Street, all blocks are 515 feet or shorter. This compact, regular street network provides downtown residents and visitors with convenient access to downtown shopping, Metra, nearby parks and schools, and other destinations.

¹ Outlying stations refers to all stations except the five downtown Chicago stations: Ogilvie, Union, Millennium, Van Buren and LaSalle.

Figure 1. Downtown Lisle Major Roads, with Average Annual Daily Traffic (AADT)



Transit

Lisle's public transportation service consists of eight Pace Bus Routes, almost all of which originate from or pass through Downtown Lisle, and the Metra BNSF Rail route via the Lisle Station located in the study area.

Pace Ridership

There are eight Pace Bus Routes and 85 Pace stops within the Downtown Lisle study area. All routes serve the Lisle Metra Station with the exception of the recently established Route 722 (Ogden Avenue) which travels along Ogden Avenue, then north on Main Street to Warrenville Road. None of the routes have Sunday service.

Overall, ridership has decreased significantly since 2008 among the study area bus routes despite a more modest decline in ridership within the Pace system. In 2008, study area routes had a total average weekday ridership of 779. In 2016, average weekday ridership among these routes was down 52 percent to 373 riders. Ridership within the larger Pace system declined by only 19 percent over the same period. One potential explanation for this disproportionate decline is the introduction of a new express service (Route 850) between Bolingbrook and the Chicago Loop along I-55 corridor. The express bus on shoulder program along I-55 began as a pilot program in 2011, and has been expanded several times due to increasing demand. Many of the Lisle Metra station users come from communities to the south where service along Metra's Heritage Corridor line is limited. Route 850 provides a faster, more economical commute to downtown than taking a bus route and connecting to Metra. It is likely that many former Route 824 and 825 passengers shifted to Route 850.

These ridership totals also exclude Route 722, which has only been in service since June 2016. The Ogden Avenue (722) bus serves several employment centers and station areas along the I-88 corridor, and has an average weekday ridership of 171. This is nearly double the ridership of the next most popular routes in Lisle— Route 827 (Green Trails-Steeple Run) and Route 828 (North Lisle).

Figure 3. Pace Routes serving downtown Lisle

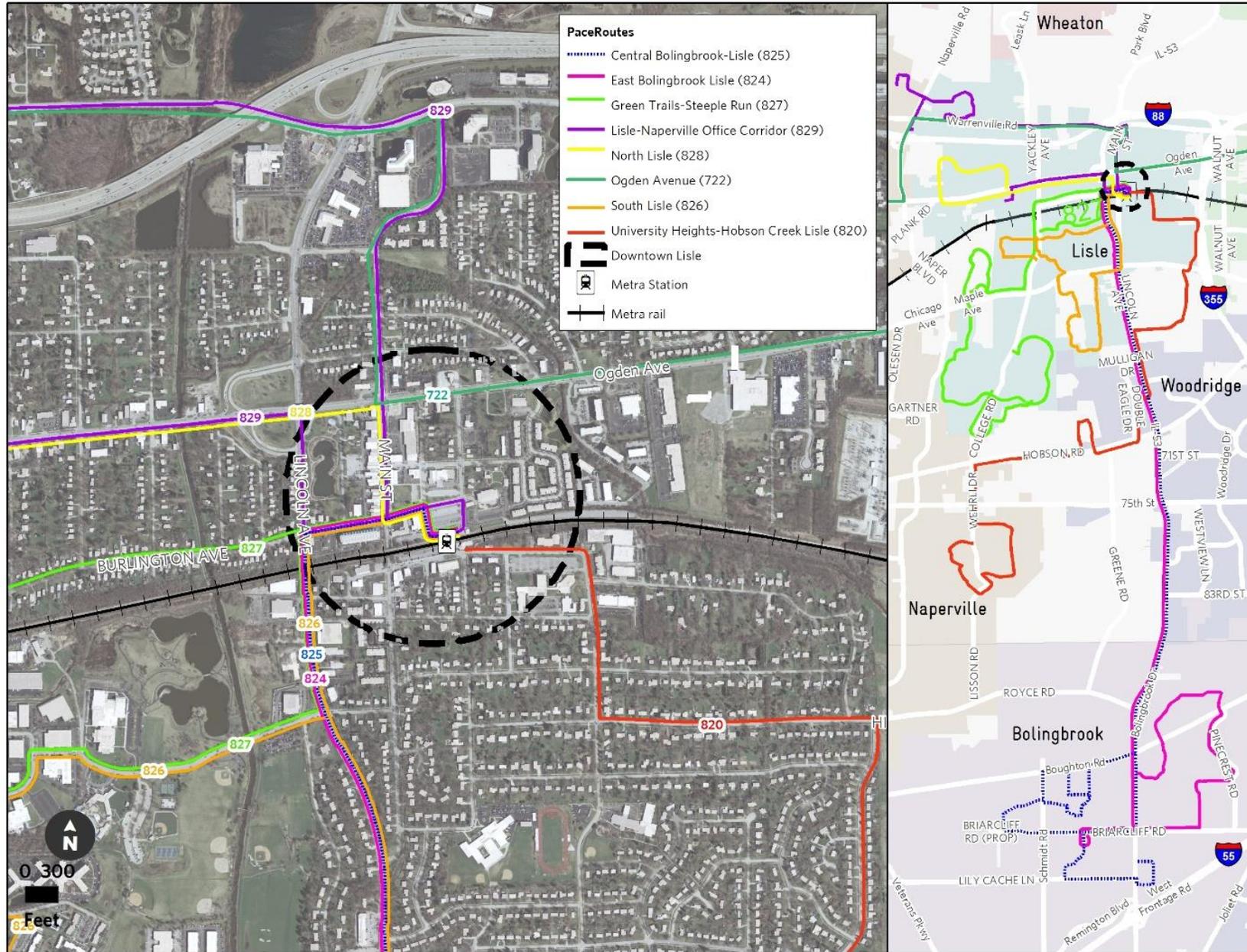


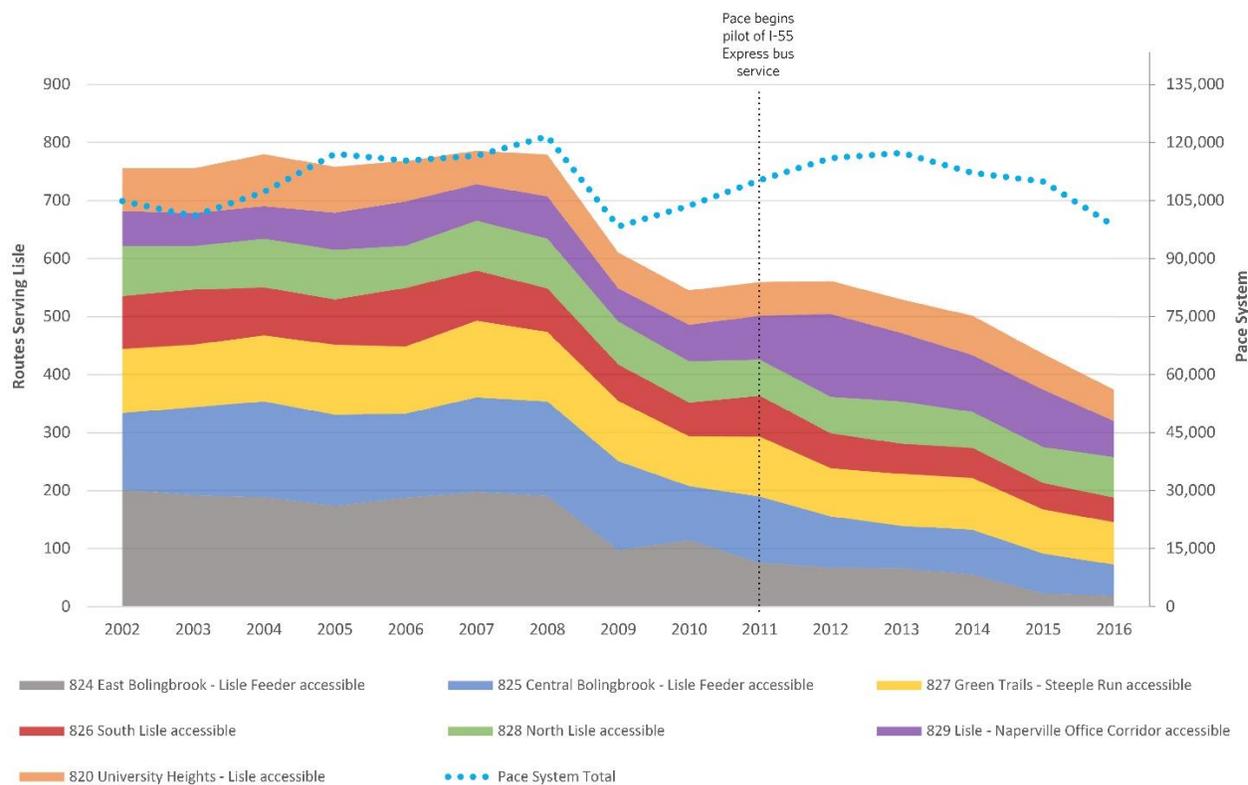
Table 1. Pace Bus Route Ridership*, 2016

Route Number and Name	Weekday Ridership	Saturday Ridership	Sunday Ridership	Links to Map and Schedule
Central Bolingbrook-Lisle (825)	60	No Service	No Service	Route 825
East Bolingbrook Lisle (824)	25	No Service	No Service	Route 824
Green Trails-Steeple Run (827)	81	No Service	No Service	Route 827
Lisle-Naperville Office Corridor (829)	61	No Service	No Service	Route 829
North Lisle (828)	73	No Service	No Service	Route 828
Ogden Avenue (722)	130	75	No Service	Route 722
South Lisle (826)	43	No Service	No Service	Route 826
University Heights-Hobson Creek Lisle (820)	58	No Service	No Service	Route 820

*Ridership is averaged over the course of the year.

Hyperlinks are "http://www.pacebus.com/sub/schedules/route_detail.asp?RouteNo=###", with ### replaced with each route number.

Figure 3. Pace Bus Route Annual Ridership**, 2002-2016



** Excludes Route 722, which began service in 2016

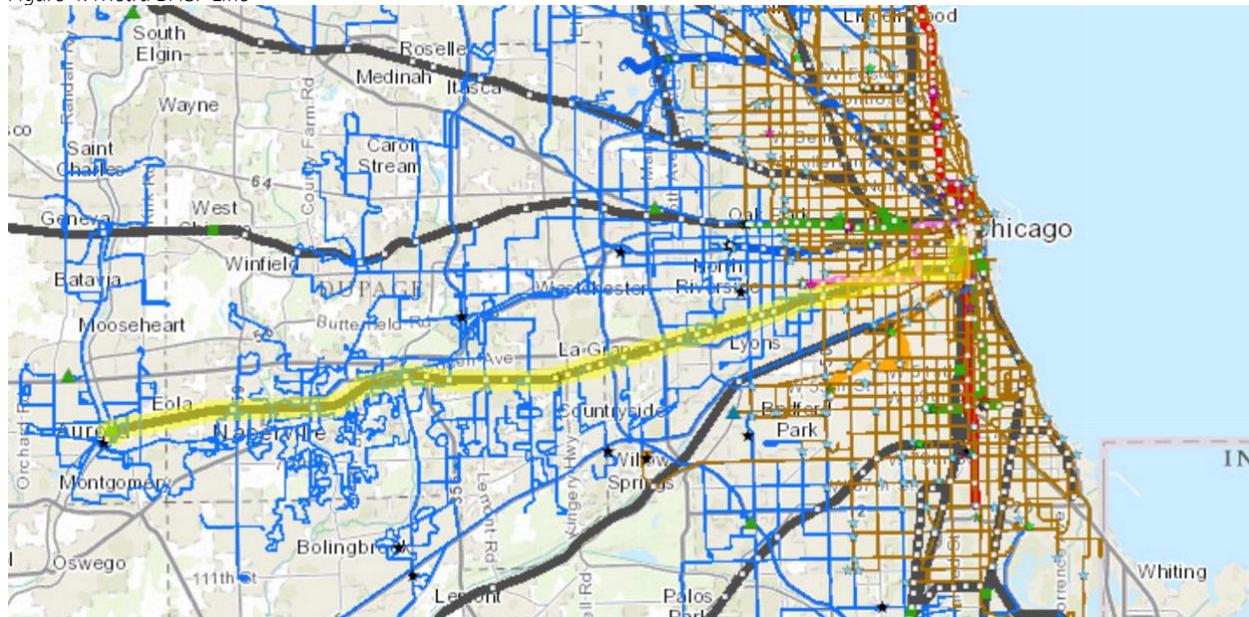
Source: RTAMS, 2016.

Metra

The Metra BNSF Line is the busiest route in the entire regional commuter rail system, traveling 37.5 miles from Chicago Union Station to the Aurora Transportation Center. In 2016, the route recorded an average of more than 1.35 million total boardings per month. As such, BNSF ridership represents more than one-fifth of total Metra ridership in any given month and is more than 40 percent higher than that of the second most popular route, the Union Pacific Northwest Line.

In the last year that Metra collected the boarding-alighting count (2014), the Downtown Lisle Metra Station had the 5th highest number of boardings along the BNSF (excluding Chicago Union Station) with 1,993 on an average weekday. Based on typical weekday boardings, the Lisle station also ranked the 10th busiest out of all 236 stations in the Metra system. A high number of express trains that stop at the Lisle station makes it an attractive boarding location.

Figure 4. Metra BNSF Line

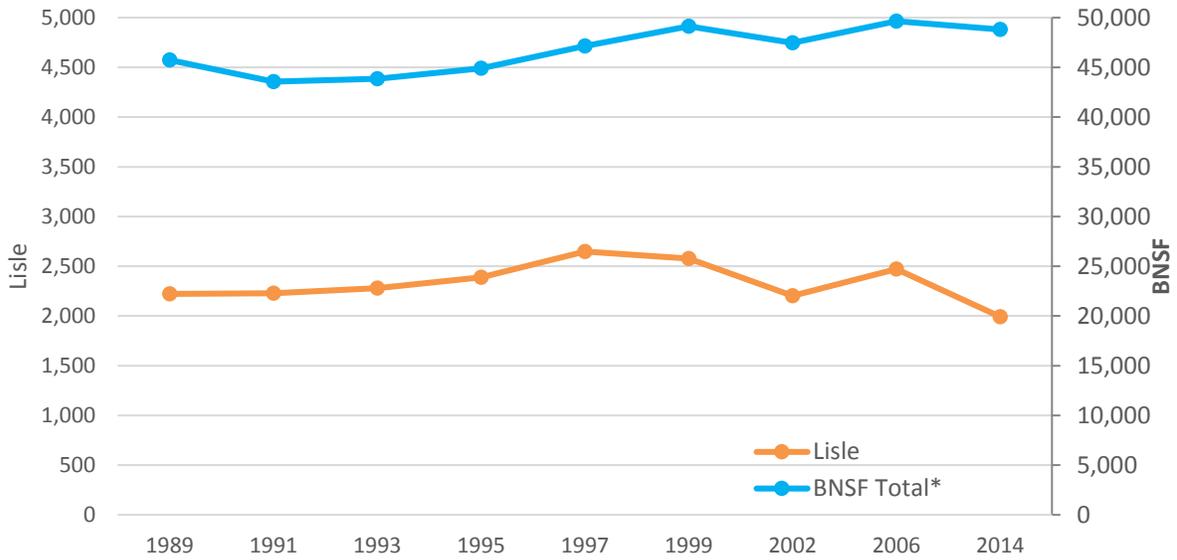


Metra Ridership

The 2014 Metra Boarding-Alighting Count found that usage of the commuter rail service in Lisle followed traditional commuting patterns with the vast majority of riders boarding an inbound train toward Chicago in the morning and alighting from an outbound train from Chicago in the evening. About 9 percent of Metra riders using the Lisle station are reverse commuters who alight an outbound train during the AM peak period. With five outbound morning peak period trains, including three express trains, there is potential to increase reverse commute ridership.

Similar to overall BNSF ridership, data over time (from 1989 to 2014) shows a general trend of increasing ridership through the late 1990s and then moderate fluctuation thereafter. Overall, ridership (as measured by weekday boardings) at the Lisle station decreased by 10 percent between 1989 and 2014, while ridership along the BNSF (excluding the Route 59 station) increased by 7 percent during the same period. It should be noted that if the Route 59 station, which opened in Naperville in 1989, is included, total ridership along the BNSF increased by nearly 17 percent. As mentioned previously, the Pace Express bus on shoulder program on I-55 may also have attracted some Lisle Metra riders.

Figure 5. Lisle Metra Boarding-Alighting Count, 1989 - 2014



* Total excludes the Route 59 station which began service in 1989.

Figure 6. Metra Boarding-Alighting Count at select BNSF stations, 1983 - 2014

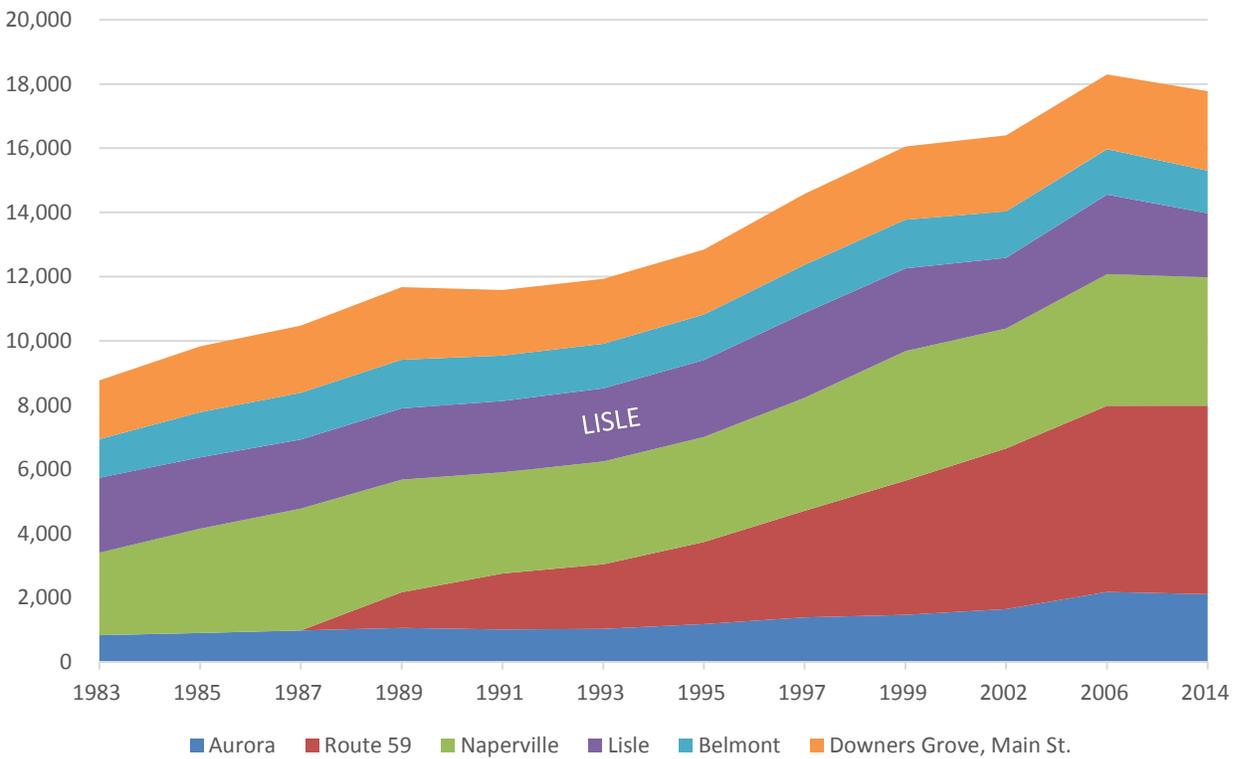


Table 2. Boardings and Alighting for the Lisle Metra Station

	AM PEAK				MIDDAY				PM PEAK				EVENING				TOTAL			
	Inbound		Outbound		Inbound		Outbound		Inbound		Outbound		Inbound		Outbound		Inbound		Outbound	
	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off
Lisle	1,641	20	16	169	95	2	12	162	180	15	20	1,462	25	5	4	186	1,941	42	52	1,979

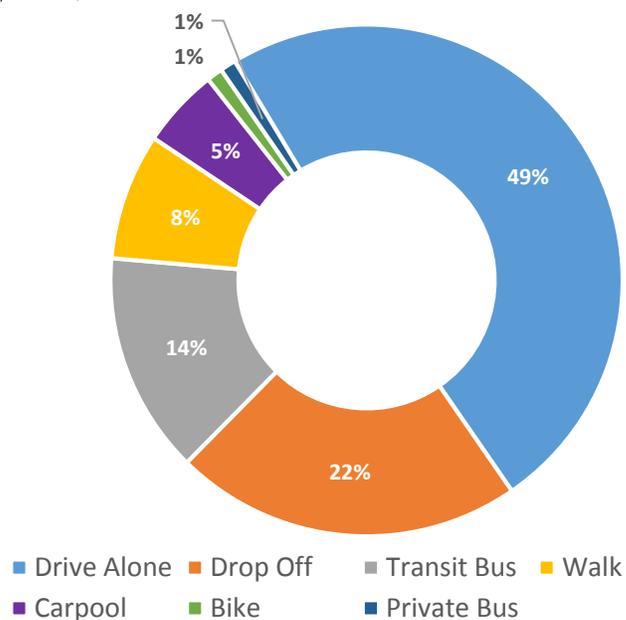
AM Peak: Start of service day to 9:15 am | **Midday:** 9:16 am to 3:29 pm | **PM Peak:** 3:30 pm to 6:45 pm
Evening: 6:46 pm to End of service day

Mode of Access to Metra stations

According to the 2014 Metra Origin-Destination and Mode of Access Survey, 49 percent of Metra riders drive alone and park at the Lisle station, with 22 percent dropped off and another 22 percent walking or arriving by bus. Only 1 percent of Lisle Metra users bike to the station; carpooling accounted for 5 percent of users. Approximately 1,300 people between the ages of 20 and 65 live within a half-mile walk of the Lisle Metra station, putting many potential users within walking distance of the station.

The following charts show the breakdown of access mode – or how Metra riders arrive at the station, and number of am riders at each station (2014):

Figure 7. Lisle Metra Mode-of-Access, 2014



Parking

As part of the 2015 Parking Counts in May 2015, Metra inventoried parking use at all of its stations. In 2015, the Lisle Metra Station area provided for 76 daily parking spaces and 749 permit parking spaces available for commuter use. Use rates were 99 percent and 79 percent for daily and permit parking respectively. The station area also included 17 ADA spaces, 9 of which were in use at the time of survey. This survey was done prior to construction work that eliminated 62 daily fee spaces. At that time, the usage rates for the eastern-most lot were only 57 percent, but with the elimination of the daily fee spaces, the eastern-most permit lot appears to be getting more use, up to 83 percent at one count*.

More detailed discussion of Metra parking is located in the **“Parking in downtown Lisle”** chapter of this report. *Parking counts conducted by CMAP staff, not included in Metra’s 2015 Parking Counts

Walking

Walkability is an important factor in the health of our communities. Elements of a walkable neighborhood include a central attraction, main street, or public space; buildings close to the street, and complete streets designed for safe travel for all modes – foot, bicycle, transit, and car. Access to amenities, stores, parks, and places of work are also important.

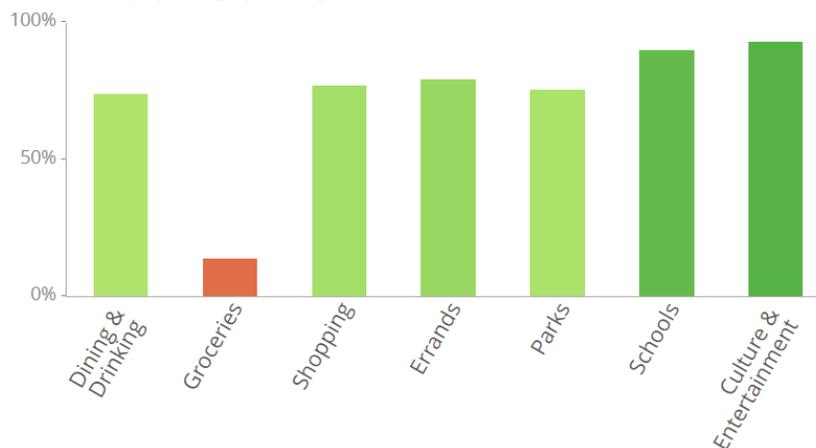
Having the ability to walk to accomplish errands or to reach a variety of amenities is good for personal health, the environment, and for household cost savings. The website WalkScore.com estimates the following:

- People in walkable places weigh 6-10 lbs. less than people in auto-oriented communities.
- For every ten minutes a person spends in a daily car commute, time spent in community activities falls by 10 percent.
- One point of Walk Score is worth \$3,000 in home value.



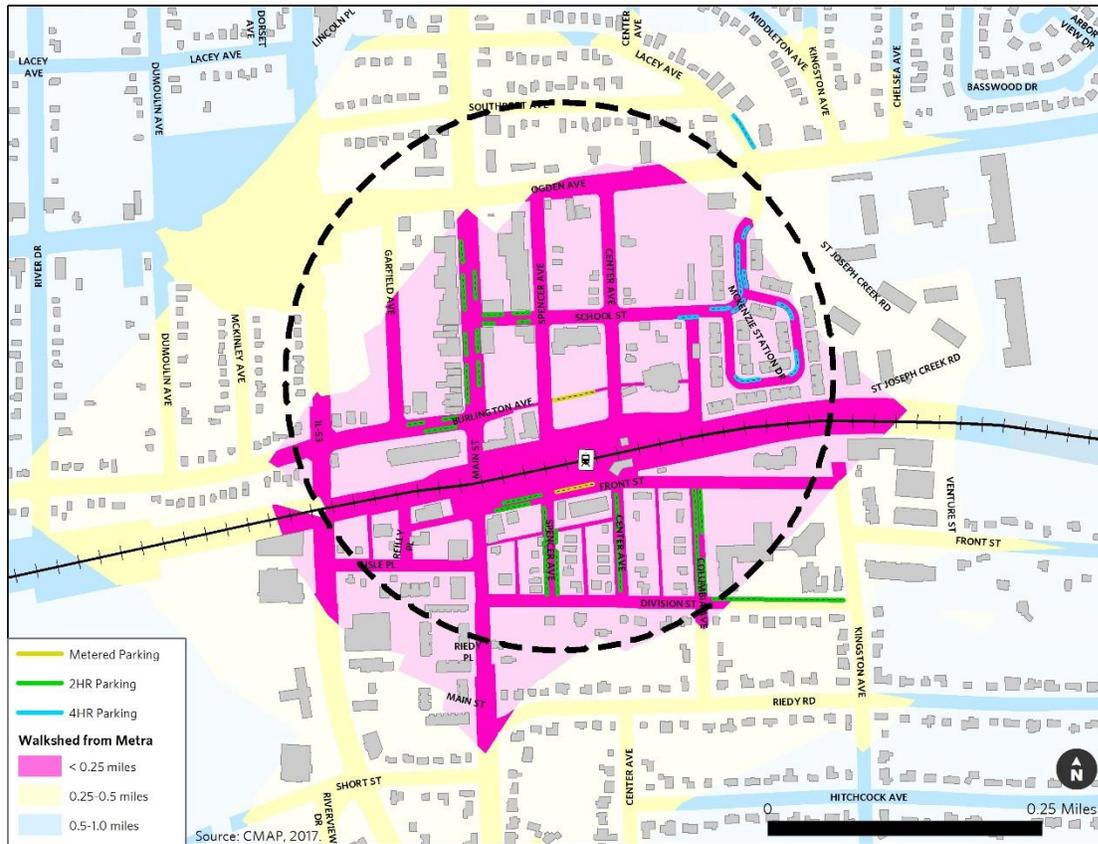
Downtown Lisle, as measured from the intersection of Burlington Avenue and Main Street in downtown Lisle, has a walk score of 59 out of 100. The area is characterized as “Somewhat Walkable” by Walk Score meaning some errands can be accomplished on foot. The primary negative contributing factor to the downtown’s walk score is the lack of a grocery store (Figure 8). Additionally, a fragmented sidewalk from the Main Street intersection to the Metra station discourages pedestrian activity. Positive factors include access to transit, parks, restaurants, and non-grocery retail.

Figure 8. Downtown Lisle Walkability by Category Scoring (Source: Walkscore.com)



A gridded street network helps to foster a walkable core, as it maximizes the number of locations that a person can access on foot within a certain distance. Most of the downtown area is within a quarter-mile of the Metra train station (Figure 9), and all of the downtown is within half a mile. Walking at a casual pace, a healthy adult can typically travel a half mile within ten minutes. While there are a decent number of amenities to walk to, low housing density in the core means that fewer people are within walking distance of those amenities.

Figure 9. Downtown Lisle Walkshed Map (from Metra station)



Crashes (2008-2014)

Most crashes involving bicyclists or pedestrians in recent years have occurred on Ogden Avenue, including the only fatal crash (between 2008 and 2014). Of vehicular crashes, most occurred along the most heavily traveled roadways: Ogden Avenue and IL-53, with a fatality on the entrance ramp to Ogden Avenue from IL-53. The two most problematic intersections, based on number of crashes between 2008 and 2014, appear to be Ogden Avenue and Main Street (29), and IL-53 and Burlington Avenue (20). Of the 19 crashes on Main Street, ten involved a car backing out of a parking spot – a safety concern expressed by several stakeholders.



Bicycling

The Village of Lisle strives to provide a network of convenient and safe bicycle routes and walking paths in the community to encourage bicycling and walking as both a form of exercise and an alternative mode of transportation. In support of this goal, the Village adopted its first Bicycle and Pedestrian Plan in 2009 to serve as the official policy guide for bicycle and pedestrian improvements in the village.

The plan provides guidance on bicycle and pedestrian goals and objectives, recommended improvements, as well as a long-term implementation strategy for enhancing the Village's bicycle and pedestrian connectivity. Key recommended bike improvements within the study are highlighted below:

- **Burlington Avenue** – Include striped bike routes along the shoulder area of the road to help demarcate areas for bike travel and provide shared lane markings in the downtown.
- **Front Street** – Provide a combination of shared lane markings and a striped bike route leading to the station.
- **Garfield Avenue** – An on-street bike route is planned in addition to a short sidepath from Garfield Avenue to Main Street that connects the network with the signaled intersection of Main Street and Ogden Avenue.

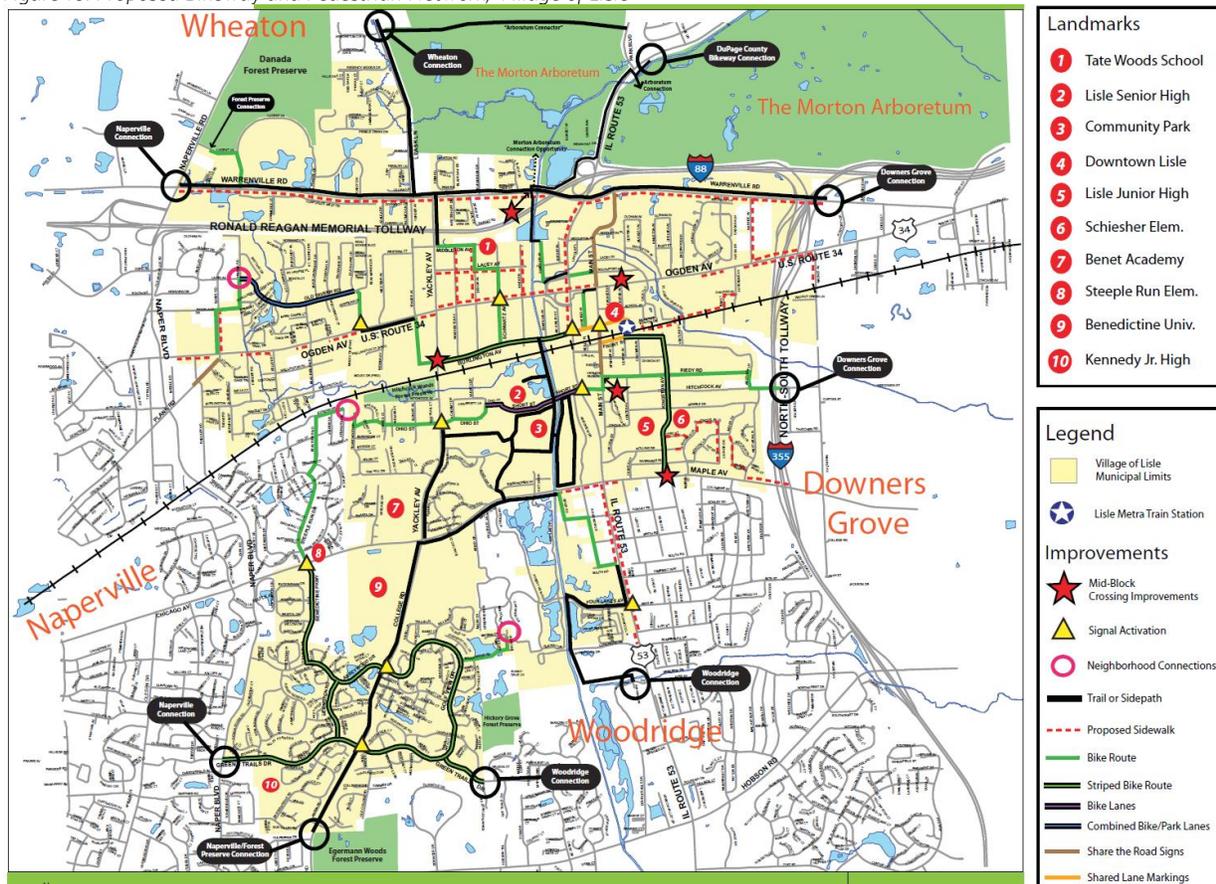
- **Main Street** – “Share the Road” signs have been installed on the periphery of Downtown on Main Street, north of Ogden Avenue and south of the railroad tracks.

While the Village has made significant progress in implementing the 2009 Bicycle and Pedestrian Plan, the most significant challenge to biking within the downtown remains the lack of a comfortable place to cross the BNSF railroad. The Main Street crossing is grade-separated, but limited roadway width prevents the use of striped or separated bike lanes. As such, bicyclists who prefer not to use the shared lane must walk their bikes along the pedestrian passage under the tracks. Missing a desirable crossing at such an important link in the downtown network likely prevents many people from biking to downtown.

Biking to Metra

The Village seeks to encourage residents to bike to the Metra Station. Two bike racks providing 60 spaces are located at the Lisle station and additional racks are located in the commuter parking lot, south of the tracks, just west of the station. The Village has created a brochure title *Bike to Metra Guide* to provide tips on bicycle commuting to and from the Lisle Metra Station. The bike racks at the station are conveniently located close to the train tracks, but there is no covered bike parking to protect bikes from inclement weather.

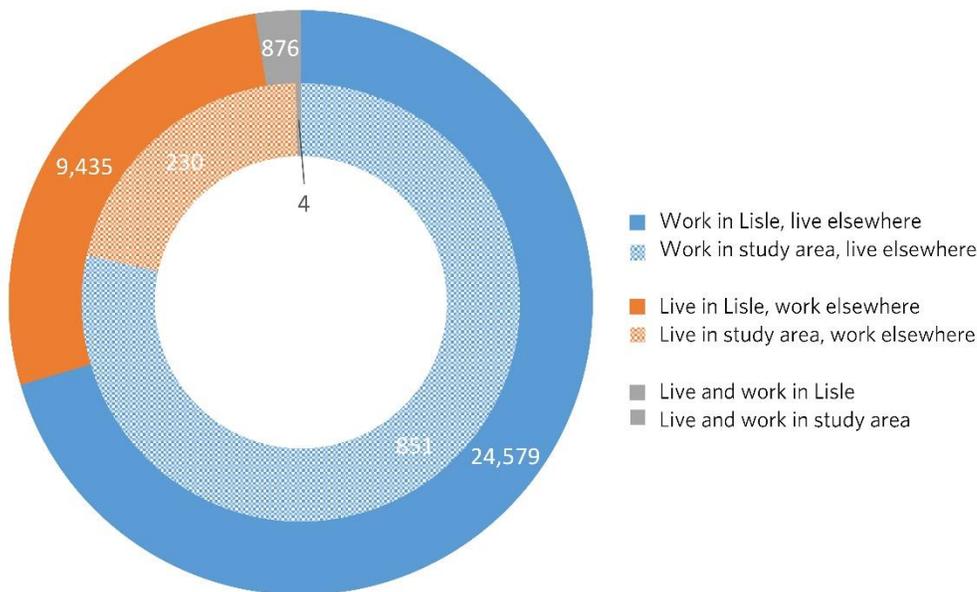
Figure 10. Proposed Bikeway and Pedestrian Network, Village of Lisle



Commuting in Lisle

According to data from the Longitudinal Employer-Household Dynamics (LEHD) – a program of the Center for Economic Studies at the U.S. Census Bureau – more than twice as many people enter Lisle to work as people who leave Lisle to go to work. Comparatively just 9 percent of Lisle’s labor force is made up of people who also live in Lisle. The following chart shows the proportion of workers by place of work and place of residence. The larger outer ring is for the Village of Lisle, and the smaller circle is for the downtown study area.

Figure 11. Village of Lisle & Downtown Study Area, 2014



Source: U.S. Census Bureau. 2014. OnTheMap Application. Longitudinal-Employer Household Dynamics Program. <http://onthemap.ces.census.gov/>

Another aspect of LEHD analysis shows where workers employed in Lisle reside. One-in-five workers who are employed by businesses in Lisle live in the City of Chicago (10 percent) or the adjacent community of Naperville (10 percent). Another 6 percent reside in Aurora and 3 percent live in Lisle. Otherwise, workers reside in communities throughout the region with no single community accounting for more than 3 percent of Lisle’s labor force. Only 38 percent of workers live within 10 miles of Lisle.

Among Lisle residents who work outside their homes, more than 80 percent drive to work alone. Transit makes up the next most significant share (8 percent); this is slightly higher than elsewhere in DuPage County (7 percent), and primarily consists of residents taking the Metra to downtown Chicago. While census data is not available to show the percentage of workers in Lisle driving, anecdotal evidence would suggest that the many residents have few options other than driving alone. The majority of workers are arriving from the western and northwestern parts of the Chicago region and the only north-south transit routes go south to Bolingbrook.

Figures 12. Labor Shed (Where Lisle Workers Live)

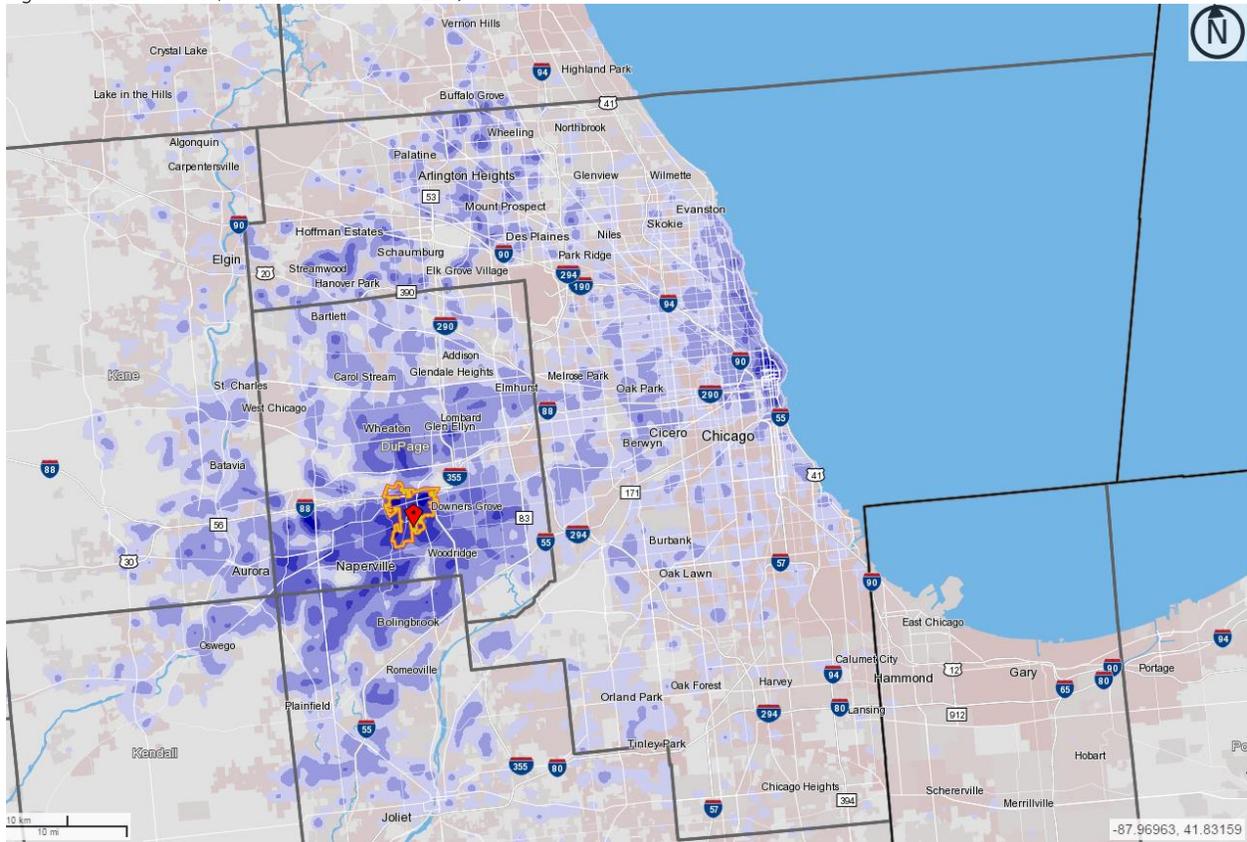
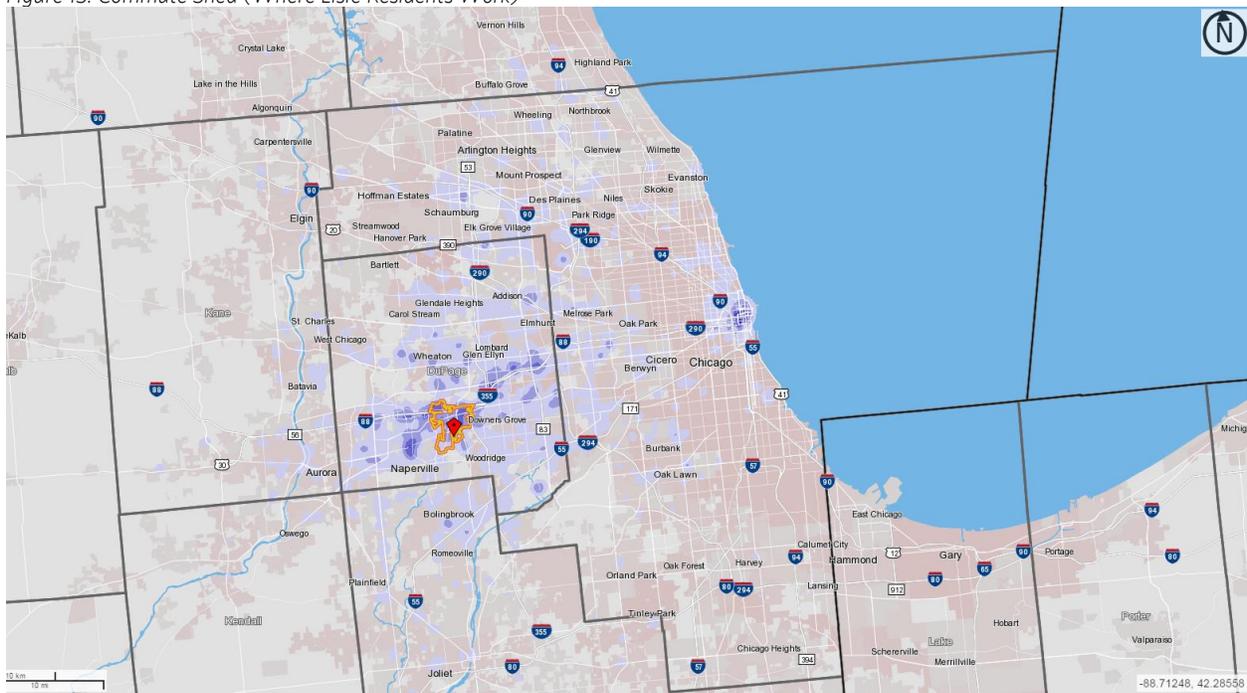


Figure 13. Commute Shed (Where Lisle Residents Work)



Parking in downtown Lisle

Downtown Lisle has a supply of parking that is more than sufficient, but several factors work against its overall utility. First, the supply is mostly private, creating a piecemeal supply of parking with some full lots and many more underutilized private lots. Second, many streets do not allow on-street parking. Third, there are few options for employees or long-term parking. Parking at the commuter rail station is in high demand.

Key Findings

- The limited quantity of on-street parking is a major hindrance to a balanced parking supply
- Adding spaces with diagonal parking was a good way to increase supply in the core, but diagonal spaces can be more dangerous for people riding bikes
- A scattered, private supply of parking is inefficient at serving the needs of a mixed-use downtown area
- The overall demand for parking is highest at lunch time when the commuter lots are full and on-street spaces in two locations see high occupancy, but that peak is still low compared to the overall supply
- During the midday turnover survey between 10 am and 3 pm, twenty percent of the spaces on Main Street were never occupied

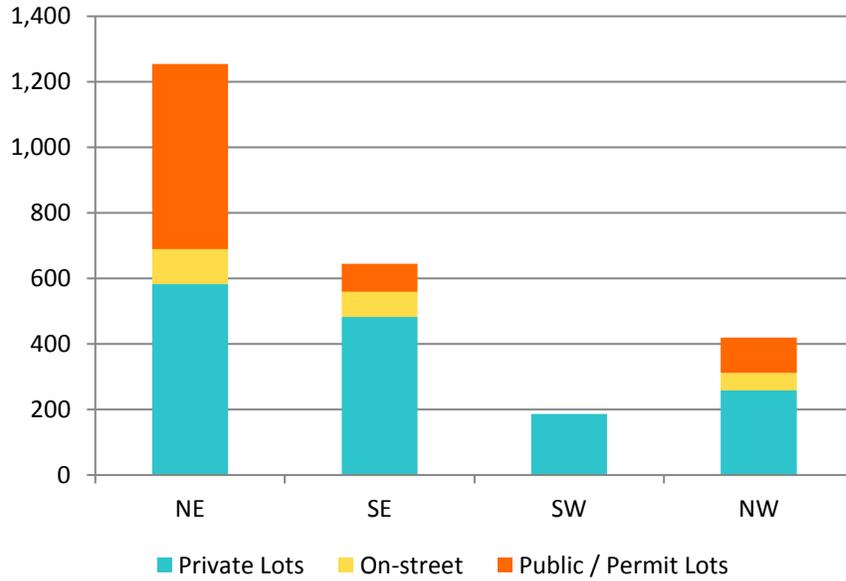
Existing Supply

The downtown area has over 2,500 parking spaces and slightly less than 1,000 are for public or permit use (permit parking is typically located in publicly owned lots). Private parking lots account for approximately 1,500 off-street parking spaces. Both public and private parking lots were surveyed to understand how supply is utilized at different times of day. For supply counts, the study area was divided into quadrants of varying sizes, with Main Street as the east-west divider and the BNSF rail as the north-south divider. The map on the following page shows the parking spaces, with colors to represent the various quadrants; the parking lots with black outlines are the public and/or permit parking lots. The approximate breakdown of the 995 public parking spaces is shown in Table 3:

Table 3. Public Parking Supply breakdown

PUBLIC PARKING SPACES		
Total public spaces	995	
Total on-street spaces	236	
Total off-street spaces	759	
<i>North of the tracks</i>	<i>673</i>	
<i>South of the tracks</i>	<i>86</i>	
Total Northwest Quadrant	161	(54 on-street, 107 off-street)
Total Northeast Quadrant	672	(106 on-street, 566 off-street)
Total Southwest Quadrant	0	
Total Southeast Quadrant	162	(76 on-street, 86 off-street)

Figure 14. Parking Supply (by quadrant)



Because less than one quarter of Lisle’s supply of public parking is on-street, rather than in off-street parking lots, identifying opportunities to increase the on-street supply could be helpful to address supply and demand challenges. Additionally, with over sixty percent of the total parking supply tied up in private ownership, identifying opportunities for shared parking should be a priority.

Figure 15. Study Area Parking Supply



Source: CMAP parking inventory, 2016. Note: Streets are not shown to scale.

Figure 16. Quadrant area overview



The northwest quadrant, in pink, has 258 private parking spaces in addition to the 107 public spaces. It is the iconic downtown Main Street with offices, restaurants, and residential. There are pedestrian amenities and there is a continuous building façade on the west side of Main Street. It also has the only lot with public parking available for more than two hours without a permit.



The northeast quadrant, in green, is the largest and has the most parking, with 1,255 spaces, about half of which are in private parking lots. This area houses the Village Hall, fire department, museum, and most commuter parking.



The southwest quadrant, in yellow, is the smallest and has the least amount of parking, with 186 spaces, all of which are in private parking lots. There is no on-street parking.



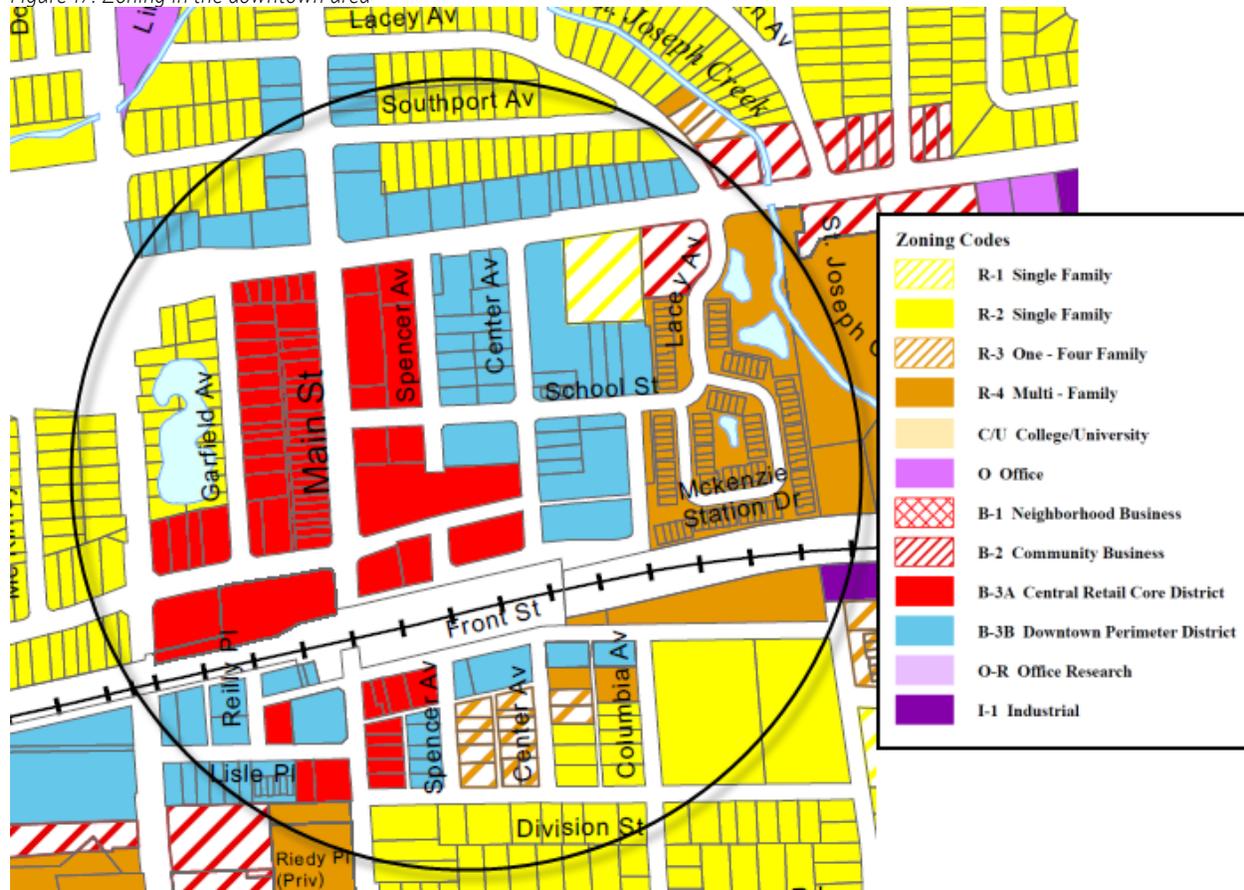
The southeast quadrant, in orange, has St. Joan of Arc school and church, one Metra commuter lot, multifamily and single family housing, and is near the library.

Parking information, signage, zoning and permits

Zoning and parking requirements

Most of the core area of downtown is zoned B-3A Central Retail Core District and B-3B Downtown Perimeter District, with some residential single- and multi-family housing nearby. While there is a slight reduction in required parking for retail establishments in the central business district and for multi-family developments, most minimum parking requirements for the downtown core are the same as the rest of the Village. Commercial uses in the B3-A core can count on-street spaces toward their parking requirements.²

Figure 17. Zoning in the downtown area



While parking requirements are intended to reduce congestion on local streets, the unintended effect is to make redevelopment of smaller parcels in more compact areas infeasible. The code requirements for large expanses of surface parking or expensive structured parking are cost-prohibitive.

There are various approaches to address the challenges with small lots and older buildings. Some municipal codes allow for reductions in parking requirements when the development meets specified criteria, such as improving the pedestrian experience to encourage walking, bicycling, and transit use. This method allows developers and businesses to get credit for certain actions or locational benefits

² Lisle Village Code 5-13-1-7-B: A credit of 4 parking spaces for each on street parking space which is directly contiguous to and which lies wholly within the frontage of the lot lines of the business establishment. One additional parking space must be provided for every 2 employees

(such as proximity to transit). The code can also include an exemption from minimum parking requirements for non-residential uses if the number of spaces required is below a certain threshold (such as 10), with Village approval. Some codes, such as Lisle's, allow for on-street parking spaces within a certain distance to count toward the parking requirements.

Places like Glen Ellyn, Hinsdale, Elmhurst and Plainfield have downtown zoning districts that exempt minimum parking requirements altogether. In Plainfield, the parking requirements were converted into the maximum amount allowed in the core. Other communities, including Naperville, Oak Park, and Lake Forest, have a fee-in-lieu of parking option that allows a developer to provide a payment to the municipality to support development of shared parking facilities in lieu of providing private parking spaces.

The Village of Lisle allows for shared parking if the hours of operation for different uses do not overlap, but it does not allow for flexible shared parking by uses with different peak periods of demand. The existing code, with parking requirements that make small lot development unlikely, and a lack of flexibility has resulted in a fragmented downtown parking supply that does not serve customers or employees well.

Figure 18. Land use and parking in the downtown area



Wayfinding and signage

The public parking lots in Lisle have extensive signage detailing hours and restrictions within the lots, but limited signage to direct drivers to the lots. There is a small sign on Burlington Avenue directing people to the Garfield Lot (Figure 19), but it is not likely to be seen by drivers on Main Street and could be easily missed by drivers on Burlington. Some of the signage is overly complex, with one sign saying that permits are required at all times, and others (within the same lot) saying that no permit is required (Figures 20, 21).

Figure 19. Garfield Lot Public Parking signage



Figure 20. Sign in Commuter Lot A



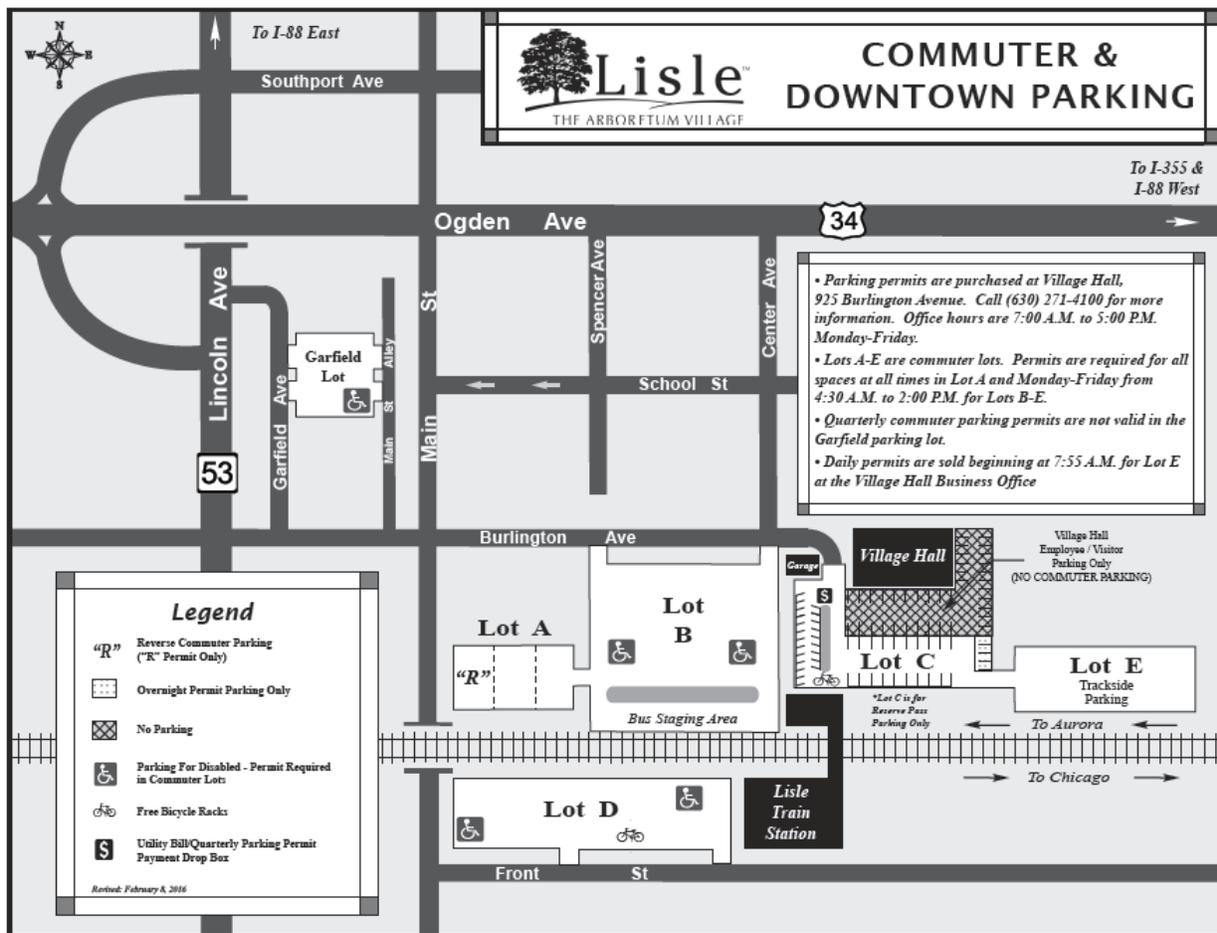
Figure 21. Sign in Commuter Lot A



Parking information

The Village of Lisle maintains a website with information about overnight parking, meters, permits, as well as the map of commuter and downtown parking. There is a substantial amount of information for commuters, including an FAQ document, but not much for downtown visitors or employees. Lisle has online payment and renewal options for commuter parking. Daily parking is available at the meters or for purchase in Village Hall after 7:55 a.m., allowing commuters to take the 8:09 a.m. train downtown. The parking meters are not shown on the commuter map, and require deposit of 12 quarters. The quarterly parking permit is \$126, overnight parking is \$6/day (free on the weekends). Reverse commuters park in the west section of Lot A, with "R" permits and must be out of the spaces by 10:00 a.m.

Figure 22. Existing Parking Map



Downtown employees are expected to park in the Garfield Lot (Lot G), where there are 97 spaces. Seven of those spaces are reserved for residents; six are for Lisle Savings and Loan Bank; twenty-five are free, four-hour parking spaces; five have no signage; and 54 are designated for employee permit parking. Employers are asked to contact the Village and notify them of new employees, to prevent commuter abuse of the lot. Employee permits are \$22.50 per quarter, and the price hasn't changed in twenty years. The Village has issued 83 permits for the 54 spaces, but the permit holders are allowed to park in the four-hour parking if there are no available permit spaces. Residential permits are the same price.

Figure 23. Parking Supply



Observed Parking Occupancy Rates

To understand where people park in downtown Lisle, staff counted the number of parked cars on street segments and in parking lots at various times of day. The occupancy maps (in Appendix) show line segments and surface parking lots color-coded by the percentage of parked cars observed at that time of day.

The first count was conducted at 9:00 a.m. on a weekday morning, followed by hourly counts until 6:00 p.m. It is understood that the main commuter parking lots are mostly full by the time the last Metra express train to Chicago arrives. Since most downtown businesses are not yet open, staff did not conduct parking counts very early in the day. While parking occupancy will vary from day to day, month to month, and seasonally, these counts help to give a better general understanding of where people want to park. The times were chosen to reflect peak demand periods and arrival and departure times of downtown employees, lunch patrons, and commuters. For follow-up analysis or new counts, if staff resources do not allow for data collection at multiple time periods, follow-up parking counts could be conducted at 11:00 a.m. on a weekday, or at times reflective of any changes in land use or business peak periods. For instance, if more restaurants open, evening demand for parking will increase and may necessitate more parking counts at 6:00 p.m.

The percentage breakdowns used in the maps were chosen to reflect our target occupancy rate of 85 percent, and show where occupancy is extremely low. When the street (or lot) is 85 percent full, that means there are many cars parked, but about one of every seven spaces is still available. When occupancy levels exceed 90 percent, this leads to “parking congestion,” where drivers circle the block in search of parking, or queue up to take available spots. Occupancy below 80 percent could indicate that shoppers are abandoning the downtown area for other locations. Ideally, all the streets and lots in the downtown core would be blue, indicating a high level of activity without complete parking congestion, in the range of 75 to 90 percent occupied. Beige indicates that fewer than 25 percent of spaces are occupied; pale yellow indicates that there is 26 to 50 percent occupancy; green is 51 to 75 percent occupied; and red is above 90 percent - sometimes exceeding 100 percent in parking lots where cars were illegally parked and / or observed circling for spaces when the lot was already full.

Due to high demand for commuter parking on weekdays, weekend parking counts were not conducted. Similar patterns of parking on Main Street are expected on weekends, with less congestion by Evviva’s, as the commuter lot is available to customers. Private parking lots were also included in the survey to compare with the Village supply. Not all parking spaces were counted at all times of the survey. All maps of the surveyed times are provided in the appendix.

Weekdays: Morning

Commuters are generally the first to arrive downtown, as indicated by the occupancy in the large commuter parking lots. There is frequent weekday Metra train service to downtown Chicago Union Station during the morning rush hour, with many “express” trains (indicated in green in the table below). Many commuters want to arrive at their jobs by 9:00 a.m., so the rush for commuter parking in Lisle is between 6:30 a.m. and 8:00 a.m. At 8:00 a.m., the lots primarily used by commuters are approaching 90 percent occupancy. The large lot with 187 spaces converts to free parking at 2:00 p.m., and it is typically full first. Most businesses are not yet open on Main Street, but many employees have arrived by 9:00 a.m., and Fox Restaurant at the corner of Ogden and Main St. is open and serving breakfast.

Table 3. Metra Lisle to Chicago Union Station weekday train schedule (express trains shaded in green)

Train #	1200	1202	1206	1212	1218	1230	1226	1234	1238	1246	1248	1258	1260
	AM												
Lisle	4:50	4:59	5:47	6:00	6:27	6:41	6:52	7:13	7:23	7:33	7:51	8:09	8:40
Chicago Union Station	5:32	6:00	6:22	7:00	7:03	7:44	7:28	7:49	8:22	8:10	8:27	8:51	9:47

Weekdays: Mid-morning

At 11:00, conditions do not drastically change from the early morning. The Garfield Lot gets slightly fuller, and Evviva’s parking lot is full. The commuter lot south of the train tracks is probably close to 90 percent full most weekdays, with slight fluctuations, dropping it into the “blue” category on some counts. And the long eastern commuter lot is similarly close to the 75 percent breakdown, going between “green” and “blue” on different counts. On pleasant summer days, the Garfield lot will have many more people parked to use the splash pad.

Weekdays: Noon and early afternoon

Lunchtime rush hour seems to change the parking occupancy from the mid-morning levels, particularly around the restaurants Yerba Buena, Evviva’s, and Raimés (shown with stars below). Raimés employee parking lot is full.

Weekdays: Afternoon

Similar patterns from lunchtime and early afternoon continue into the later afternoon, with reduced occupancy by the restaurants. The commuter lots remain as they have for most of the day. By 4:00 p.m., the commuter lots adjacent to the tracks begin to empty out.

Table 4. Metra weekday evening trains arriving in Lisle from Chicago Union Station (express trains shaded in green)

Train #	1235	1237	1239	1243	1247	1251	1259	1269	1273	1279	1281	1373	1285
	PM												
Chicago Union Station	2:30	2:34	3:18	3:58	4:28	4:44	5:04	5:26	5:36	5:49	6:00	6:18	6:22
Lisle	2:57	3:26	3:45	4:29	5:04	5:13	5:33	5:55	6:35	6:18	6:54	6:51	7:12

Weekdays: Evening

As commuters begin returning to their cars, the main commuter lots begin to empty out. There is a flood of activity with each train that arrives in the station, with many Pace buses, cars picking up passengers, and commuters leaving the lot. Some businesses are closing for the evening, but the area around Evviva’s remains busy after 6:00 pm. The increasing availability of the commuter spaces is convenient for Evviva’s customers. The Garfield Lot and Raimes employee lot are also still busy, and some residential lots see higher occupancy.



Parking usage

Community concerns about parking

Many stakeholders expressed the desire for a parking garage, noting a lack of on-street parking. Some of the restaurants would like a parking garage (near their respective restaurants), and some Metra commuters would like a parking garage next to the station. A parking garage can be a good way to consolidate surface lots and turn land over for more productive uses, but the parking occupancy results from this study do not indicate that the demand in Lisle is high enough to warrant such a significant investment at this time.

At \$30,000 per space for structured parking, the investment should be weighed with the benefits that come from additional cars parked in it. Six million dollars will produce approximately 200 spaces. If they will be used for commuters (who often do not spend money downtown), it would make economic sense if the commuters would be willing to pay \$5 per day to cover the general debt service. That is much more than what commuters currently pay, and might not be well-utilized at that rate. If the garage is for customers of downtown businesses, would the added tax dollars be likely to generate an equivalent of \$5 per day per space? Anything less, and the Village will be losing money on the investment.

In the words of renowned urban planner, Jane Jacobs, “There will never be enough parking.” Therefore, the Village must make the determination of how much the investment is worth and whether it will pay out over time. When pricing is not used to balance demand, the demand will quickly be used up. As experienced in nearby Naperville, the City continues to identify locations for additional garages as new capacity fills up. Shoppers complain that there’s still not enough parking, and some stakeholders even said that they avoid Naperville because it’s so hard to find parking.

Stakeholders also suggested that School Street as a one-way reduces parking options. Suggestions to return School Street to two-way would reduce the number of on-street spaces, because the diagonal spaces would become parallel spaces, but they would be more convenient to access for downtown customers. School Street could potentially have added parking east of Spencer Avenue, assuming enough space remains for fire truck access. If the fire department decides to relocate to a more highway-accessible location, parallel parking could be added to both sides of the street.

Another important concern is that as vacant storefronts fill up, the parking needs will be much higher. This is true to some extent, but can be mitigated by strategies that will be explored in the final parking plan.

Turnover of spaces

In the fall of 2016, CMAP staff conducted a turnover survey of on-street spaces in the downtown core. Between 10 am to 3 pm, 100 spaces in the core were observed at 20-minute intervals. Twenty percent of the spaces were never occupied, and most cars stayed within the 2 hour limit. The 15-minute spaces were used for much longer than 15 minutes. The spaces by Yerbabuena were the most full.

Parking usage analysis

The peak parking period was midday, aligning with stakeholder assumptions. From CMAP's occupancy counts, the noon period had the highest parking occupancy, with an average of 55 percent occupied. Fifty-five percent is well below the target occupancy of 85 percent, but drivers still encounter difficulty finding spaces because many of the vacant spaces are in private lots that they cannot use. There are several parking lots by vacant buildings or buildings with low tenant occupancy, and those parking lots are nearly empty most of the time. Commuter lots are full and many other lots reach occupancy levels approaching 75 percent full. Most on-street parking is underutilized throughout the downtown area, with the exception of the metered commuter parking, the spaces on Front Street by Evviva's, and the block in front of Yerba Buena. Parking on School Street is underutilized because drivers on Main Street cannot turn east onto School Street because it is one-way.

With so few residential units in downtown, most people arriving to shop and dine in downtown Lisle are driving. Some people will ride bikes, some will walk, but the majority of visitors and employees are driving to downtown. An increase in residences would bring new customers without putting large burdens on the existing parking supply. The Village should look to add on-street parallel parking wherever there is space available, as it is a convenient public resource and it makes walking along sidewalks more pleasant to have a physical barrier between pedestrians and moving cars.

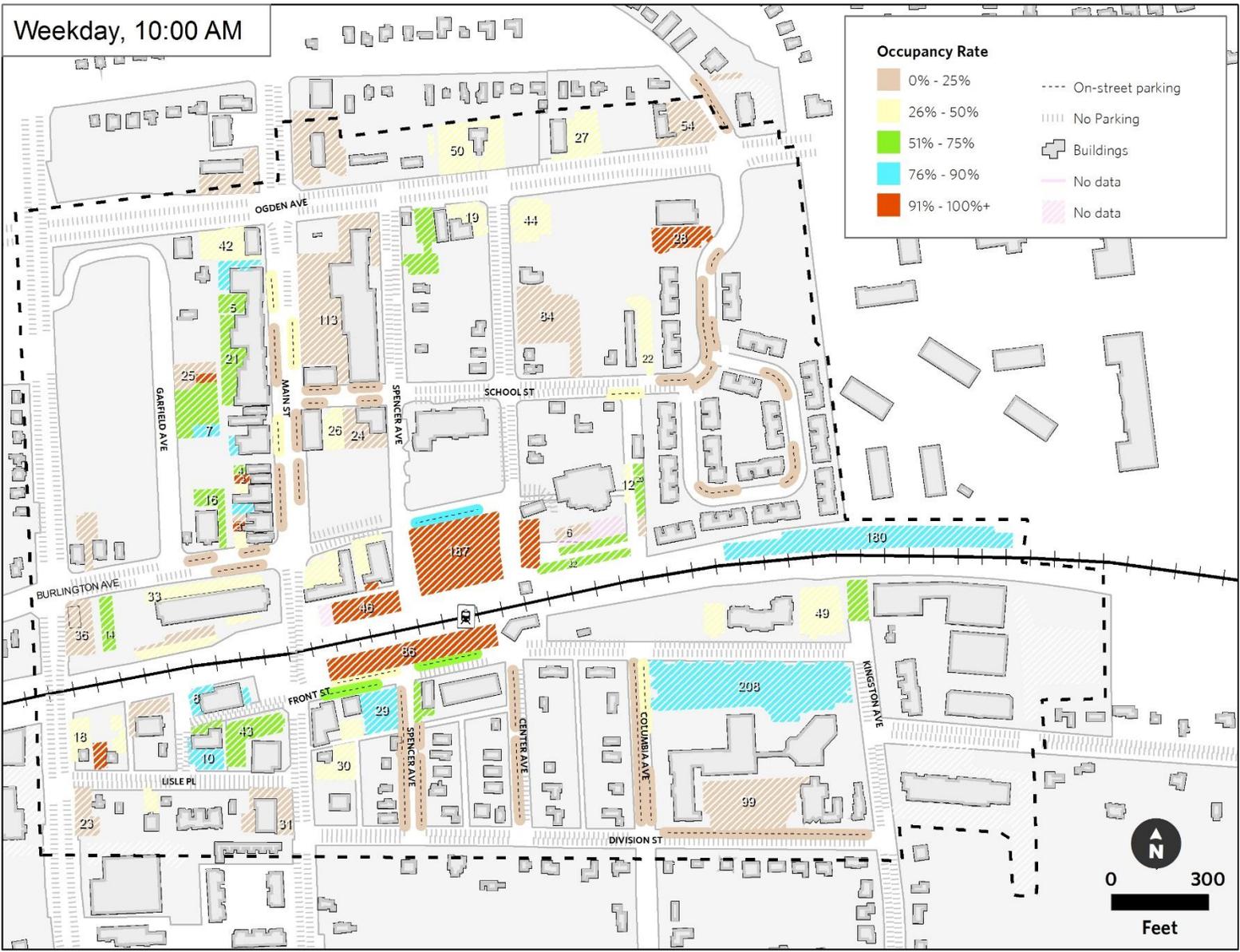
As mentioned, the construction of a new parking garage would cost approximately \$30,000 to \$40,000 for each additional space, and would not be financially sustainable until drivers are willing to pay \$5 per day, or businesses and taxpayers are willing to subsidize the cost of \$5 per day per space. This is not a recommended course of action when the existing parking supply is just over half full at the peak period. Opportunities for shared parking, lot consolidation, and expansion of general public parking and employee parking should be explored first. For the daily, metered commuter parking, digital payment options should be added and additional paid spaces should be considered for high-demand locations.

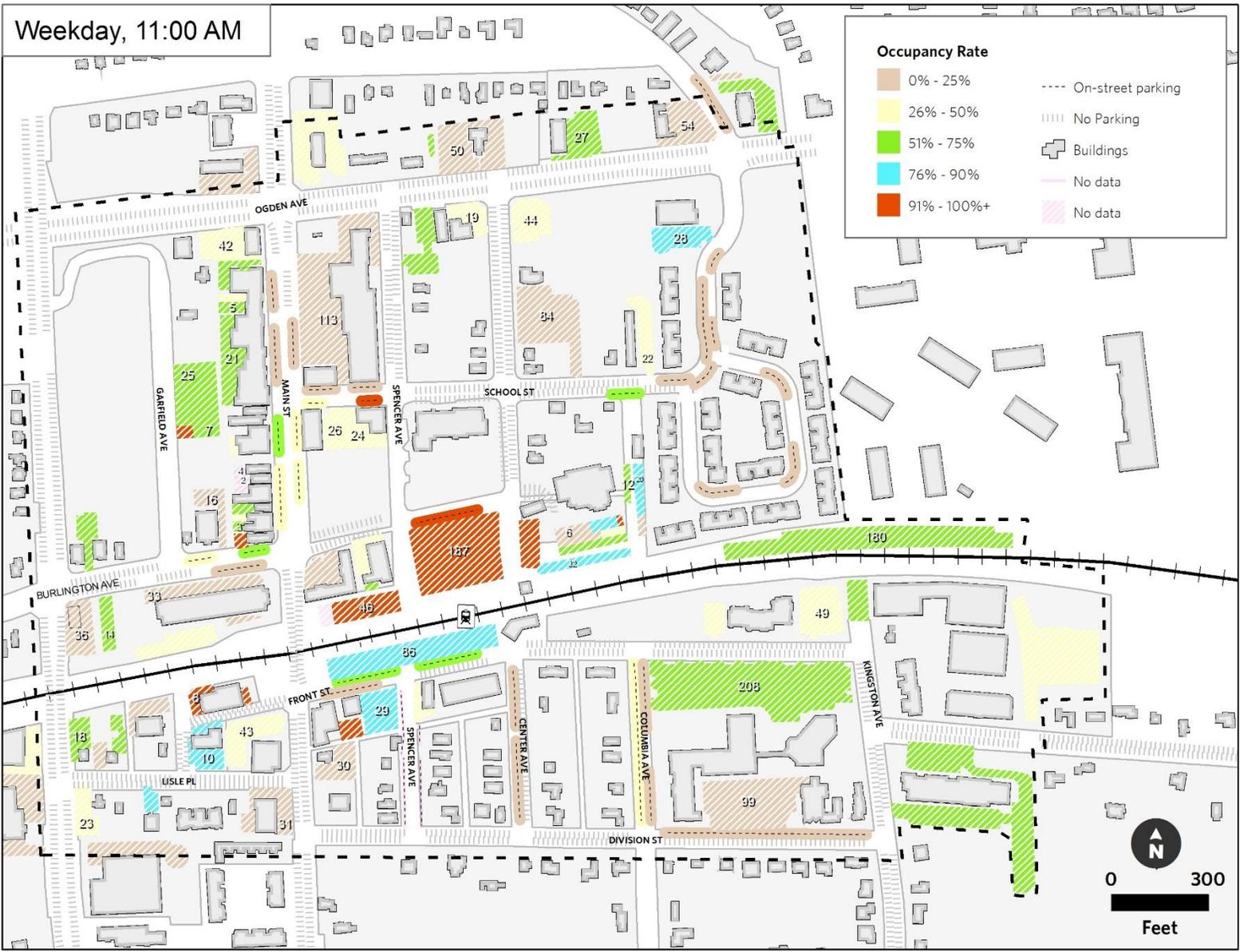
Conclusion

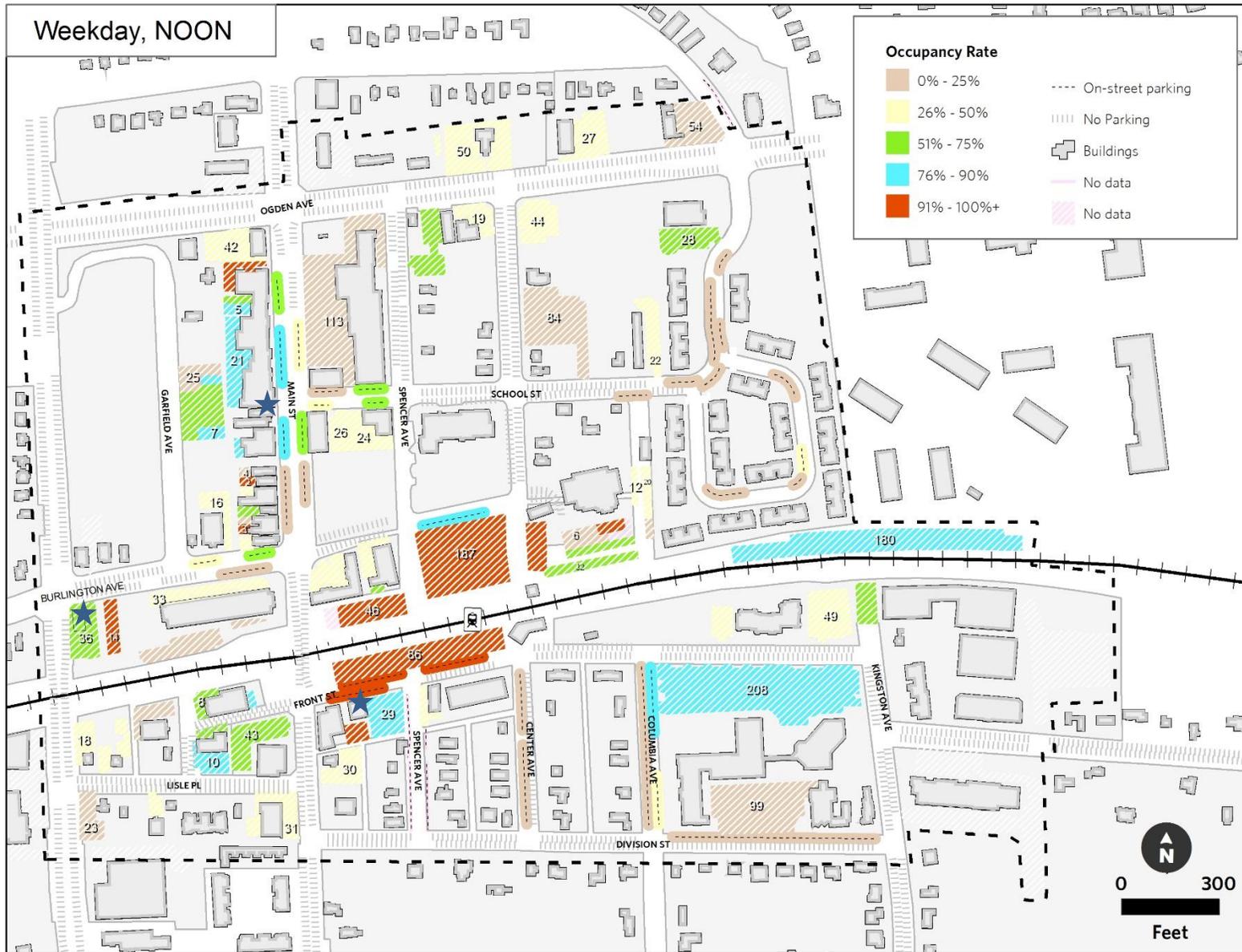
The goal of improved parking management is to facilitate and enable a thriving central business district. Any mixed-use downtown that wants to create a vibrant, walkable core should have a good balance of office, retail, dining, entertainment, housing, schools, recreation, worship, and parking. Typically, housing is the factor that is most under-represented, which makes it challenging for businesses to survive and leads to more people driving. Lisle is no exception, and needs more people living in their downtown area to achieve the right balance. Added on-street parallel parking throughout the downtown, a zoning code that is sensitive to the challenges of compact development, allowance and promotion of shared parking, enhancements to the bicycling network and bicycle parking, and a long-term plan for striking the right balance between supply and demand should be the focus of the Downtown Parking Plan.

Appendix: Occupancy Maps

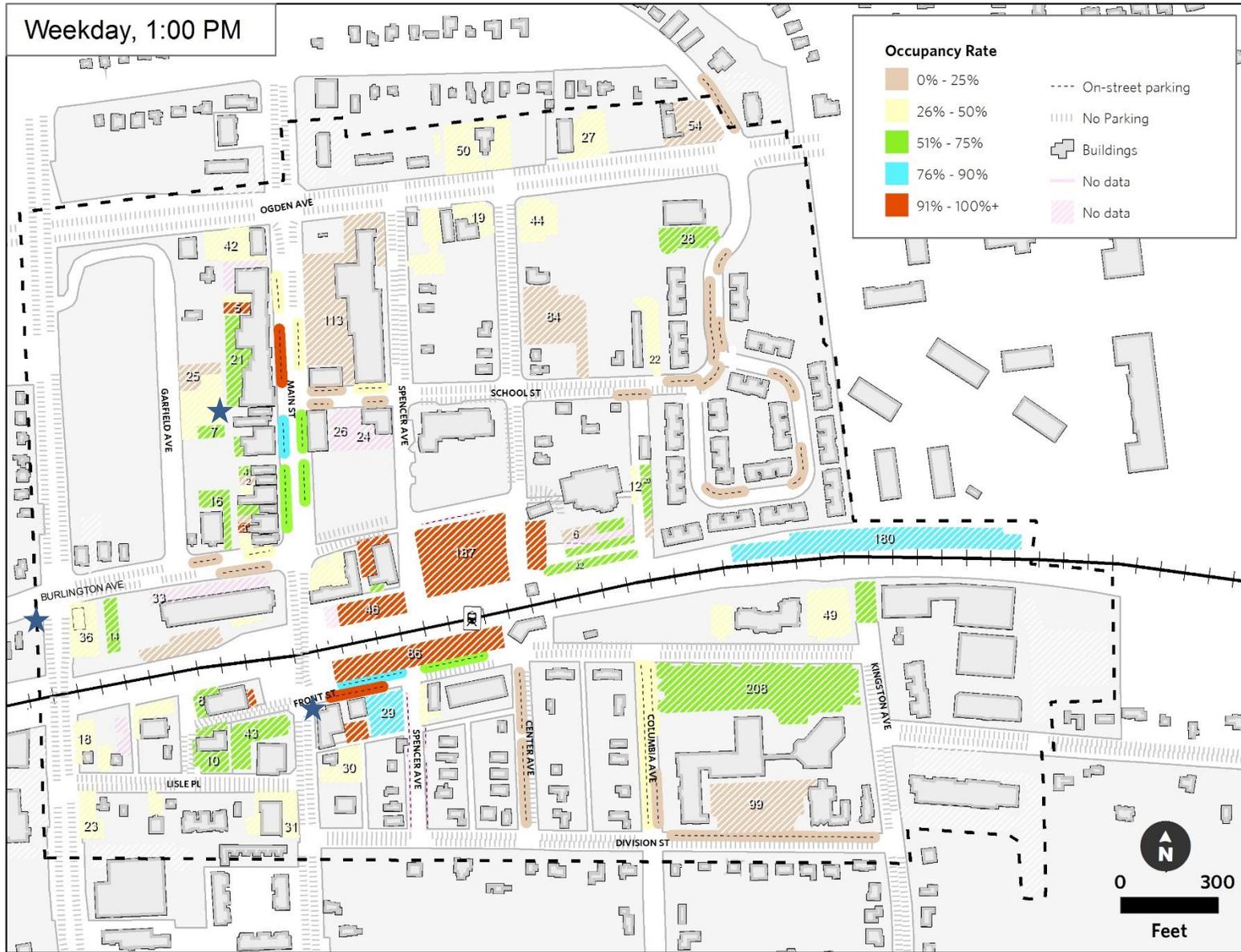




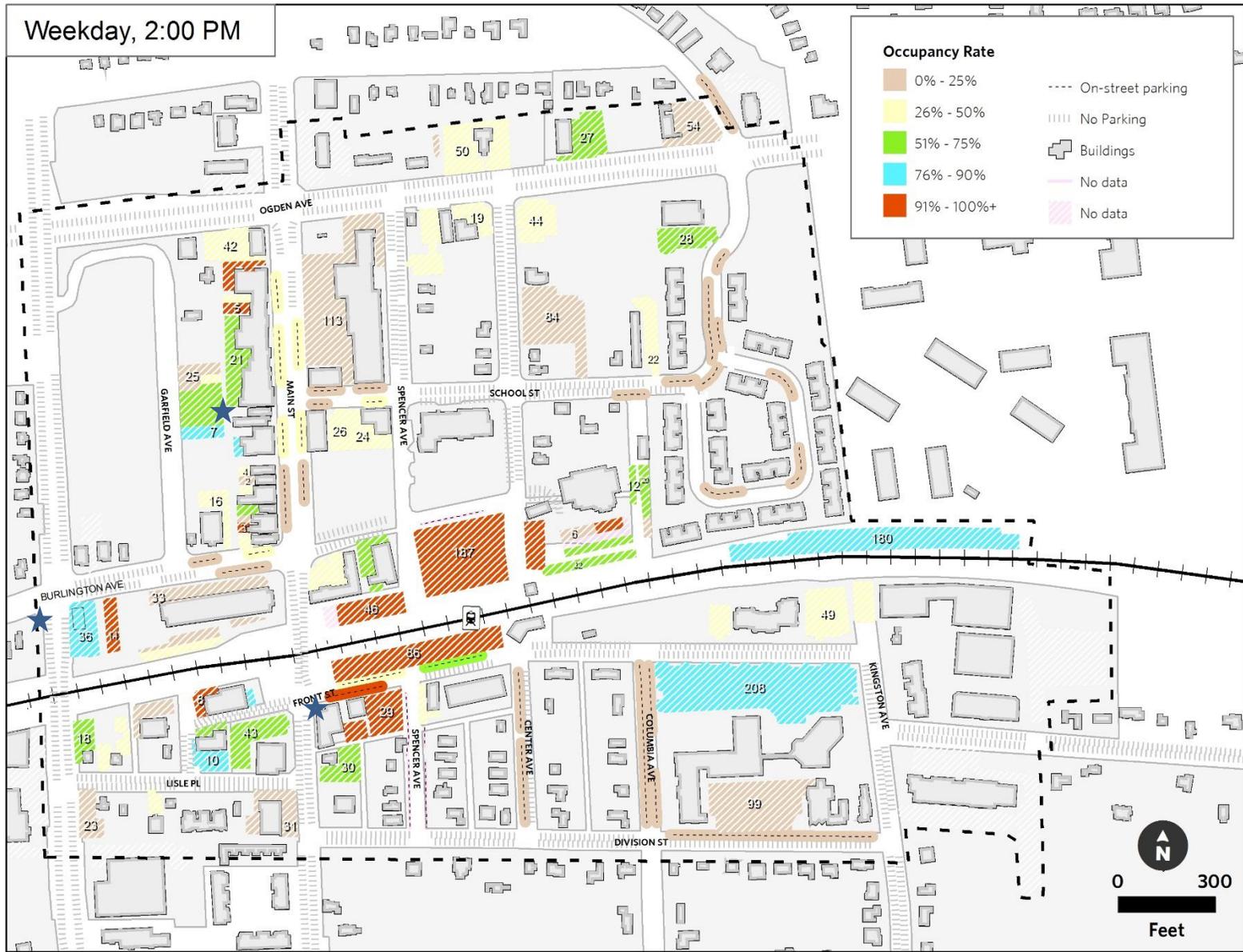




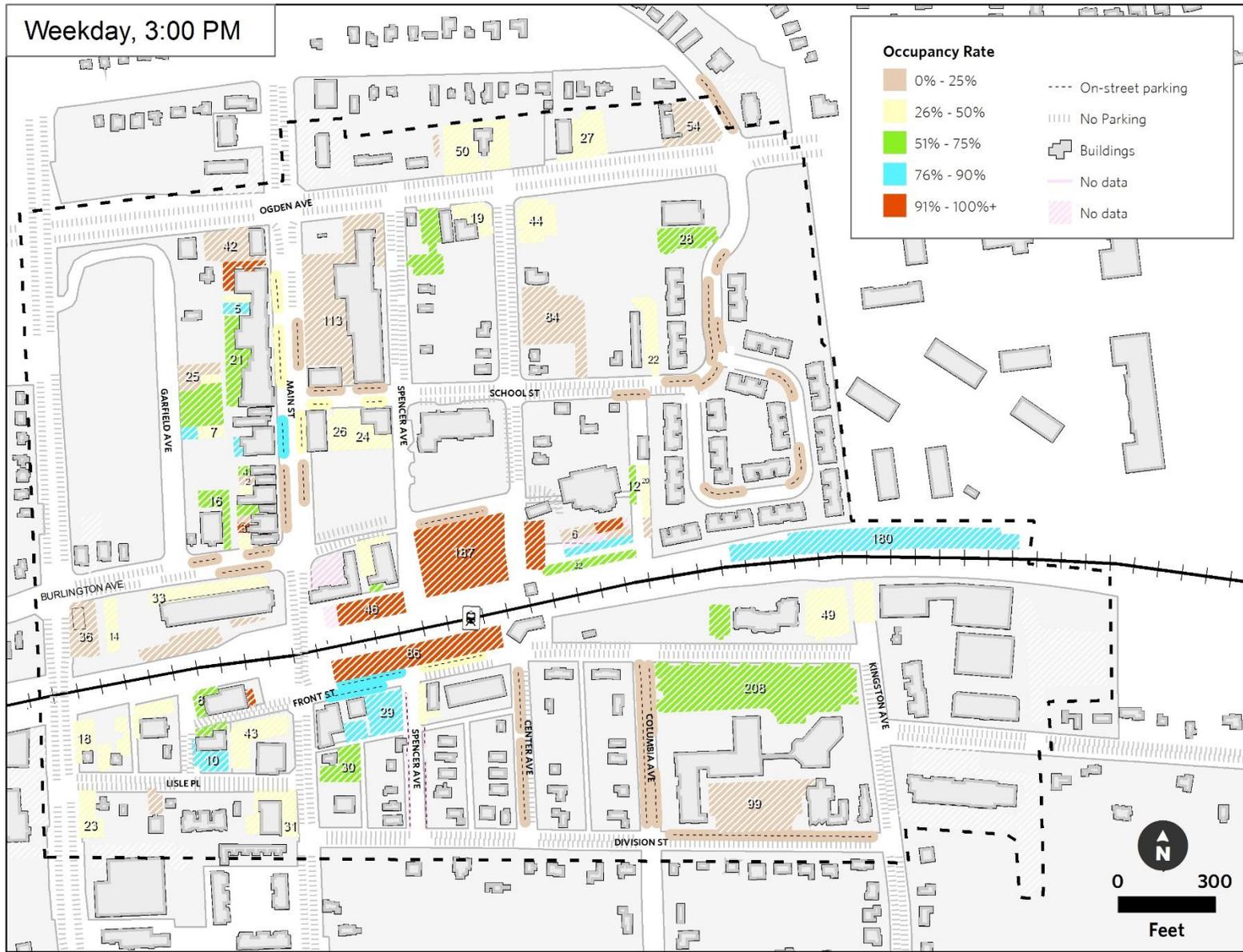
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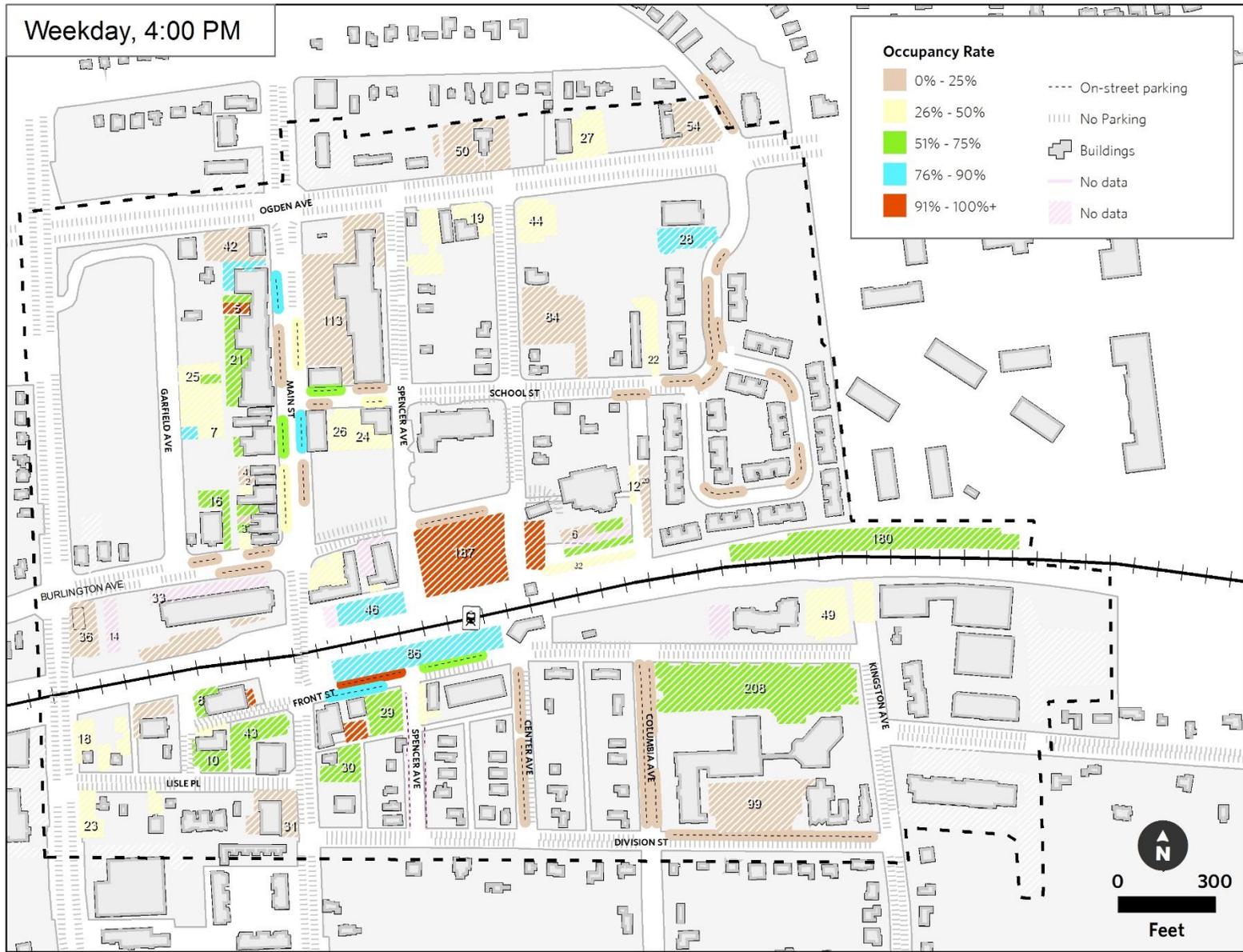
Weekday, 2:00 PM



Weekday, 3:00 PM



Weekday, 4:00 PM



Weekday, 5:00 PM



Weekday, 6:00 PM

